



Occurrence, epidemiological studies and antibiogram of bovine mastitis bacteria among different geographical areas of Haryana

RAHUL YADAV¹, VANDNA BHANOT², PANKAJ KUMAR³ and ANAND PRAKASH^{4✉}

Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana 125 001 India

Received: 21 June 2024; Accepted: 23 October 2024

Supplementary Table 1. Incidence of mastitis cases according to lactation number/ age and lactation month

Total animals (n = 8530)	Lactation number / age			Lactation month		
	Young age (1-3 years)	Mid age (4-7 years)	Old age (8-10 years)	Early lactation (1-3 month)	Mid lactation (4-7 month)	Late lactation (8-10 month)
In numbers	6055	2296	179	5893	2053	584
In percentage	70.98	26.92	2.10	69.09	24.07	6.85
Chi-square		73.220			61.580	
df (degree of freedom)		2			2	
P-value		0.00*			0.00*	

*Level of significance, P-value is significant at the 0.05 level or lesser.

Supplementary Table 2. Pearson correlation between age/lactation number and lactation month for occurrence of mastitis

		Age/ Lactation number			Lactation month		
		Young age/L. no. (1-3 yrs)	Mid age/L. no. (4-7 yrs)	Old age/ L. no. (8-10 yrs)	Early lactation (1-3 months)	Mid lactation (4-7 months)	Late lactation (8-10 months)
Young age/L. no. (1-3 yrs)	Pearson Correlation	1					
	Sig. (2-tailed)						
Mid age/L. no. (4-7 yrs)	Pearson Correlation	-.375					
	Sig. (2-tailed)	.230					
Old age/ L.no. (8-10 yrs)	Pearson Correlation	.369	-.019				
	Sig. (2-tailed)	.238	.954				
Early Lactation (1-3 months)	Pearson Correlation	.917	-.081	.285			
	Sig. (2-tailed)	.000*	.802	.370			
Mid lactation (4-7 months)	Pearson Correlation	.096	-.082	.076	.062		
	Sig. (2-tailed)	.766	.799	.814	.849		
Late lactation (8-10 months)	Pearson Correlation	.018	.104	.175	-.041	-.756	
	Sig. (2-tailed)	.956	.748	.586	.899	.004*	-

*, Correlation is significant at the 0.05 level (2-tailed).

Supplementary Table 3. Multiple antibiotics resistance (MAR value) in percentage for gram-negative and gram-positive organisms

	MAR value more than 0.2		Statistical significance		MAR value less than 0.2		Statistical significance	
	G -ve (%)	Gram-positive (%)	Chi square	P-value	Gram-negative (%)	Gram-positive (%)	Chi square	P-value
Cattle	24.40	40.46	4.000	0.04*	8.59	26.55	9.000	0.00*
Buffalo	26.15	38.30	2.250	0.13	8.67	26.87	9.000	0.00*
Total	25.55	39.05	2.600	0.10	8.64	26.76	9.000	0.00*

*Level of significance, P-value is significant at the 0.05 level or less; G -ve, Gram-negative; G +ve, Gram-positive.